

**PATENT APPLICATION**

**RESPONSE UNDER 37 CFR §1.116  
EXPEDITED PROCEDURE  
TECHNOLOGY CENTER ART UNIT 2814**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Nobuaki HASHIMOTO

Group Art Unit: 2814

Application No.: 10/788,449

Examiner: L. PHAM

Filed: March 1, 2004

Docket No.: 118875

For: ELECTRONIC DEVICE AND METHOD OF MANUFACTURING THE SAME,  
CIRCUIT BOARD, AND ELECTRONIC INSTRUMENT

**REQUEST FOR RECONSIDERATION AFTER FINAL REJECTION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In reply to the June 28, 2006 Office Action, reconsideration of the rejection of claims is respectfully requested in light of the following remarks.

Claims 1, 7-10 and 16-18 are pending in this application. In the Office Action dated June 28, 2006, these claims were rejected under 35 U.S.C. §103(a) over U.S. Patent No. 6,621,172 ("Nakayama patent") in combination with U.S. Patent No. 6,638,781 ("Hirakata patent") and U.S. Patent Application Publication No. 2005/0110124 ("Song patent application"). Reconsideration of the rejection of claims 1, 7-10, 16-18 is respectfully requested in light of the following remarks.

Claims 1 and 10 are base claims that were amended, in the April 6, 2006 response to the Office Action dated January 12, 2006, to include the limitations of prior claims 5 and 14,

namely, that the claimed invention comprises an "insulating section being formed so that part of the insulating section under the interconnect does not overlay the first surface" of the described chip component.

The most recent Office Action states that the Nakayama patent in combination with the Hirakata patent teach the invention recited in claims 1 and 10. More specifically, with respect to claims 1 and 10 as amended to recite the subject matter of prior claims 5 and 14, the Office Action directs the Applicant to "see the rejection of claims 5 and 14 in the rejection dated January 12, 2006." The referenced Office Action of January 12, 2006 provides the statement that "[w]ith respect to claims 5 and 14, Nakayama et al. in combination with Hirakata et al. further teach that the insulating resin section is formed so that part of the insulating resin section does not overlay the first surface." The Office Action does not describe where in the cited references the features in prior claims 4 and 15 are disclosed. Therefore, the Office Action does not comply with MPEP § 707.07(f), because it does not substantively respond to Applicant's arguments. Accordingly, Applicant respectfully requests a showing of where the features of the claimed invention recited in prior claims 5 and 14 are disclosed in the cited references, or alternatively, that the section 103(a) rejection of amended claims 1 and 10 be withdrawn.

In pertinent part, claims 1 and 10 have been amended to recite an electronic device having the recited features of an "insulating section being formed so that part of the insulating section under the interconnect does not overlay the first surface." Applicant respectfully submits that the closest analogous feature in the Nakayama patent to the insulating section is the second resin 90, which is used in the cited reference to seal the first 10 and second 20 semiconductor chips. The second resin 90 is formed so that part of it is positioned under the wires 26 and 46, the closest analogous feature in the Nakayama patent to the interconnects of the claimed invention. The second resin 90 is disclosed to have different properties than the

conductive first resin 74, and could therefore provide a section having insulating properties. However, if the rejection is based on the second resin 90 of the Nakayama patent providing the insulating section of the claimed invention, the cited reference discloses the second resin 90 formed so that part of the resin 90 under the wires 26, 46 overlaps the first surface of the relevant chip 20. This feature teaches directly away from the "does not overlap the first surface" feature of the claimed invention.

Applicant respectfully submits there is no other analogous feature in the Nakayama patent to the insulating section of the claimed invention. If the rejection is based on the first resin 74 providing an insulating section, the Nakayama patent does not disclose the first resin 74 being formed under the wires 26, 46. Therefore, under this interpretation, the Nakayama patent does not disclose the "under the interconnect" feature of the claimed invention. The Nakayama patent also teaches that the first resin is a conductive material, which is the opposite of an insulating material. This feature of the first resin 74 being a conductive material thus teaches away from the claimed invention.

To comply with the requirements of MPEP § 2143.03, "[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). A rejection under section 103(a) requires that all limitations of a claim be taught by the prior art. *See* MPEP § 2143.03 (citing *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)). In the present case, neither of the references cited in the Office Action, namely, the Nakayama patent and the Hirakata patent, disclose an electronic device having the features of an "insulating section being formed so that part of the insulating section under the interconnect does not overlay the first surface" as recited in amended claims 1 and 10. Therefore, even if the cited references are combined they would not teach the claimed invention.

Because the cited Nakayama reference teaches away from the claimed invention, the rejection of amended base claims 1 and 10 under section 103(a) must be withdrawn.

Applicant respectfully submits that the base claims 1 and 10 are in condition for allowance, and that dependent claims 7-9 and 16-18 are allowable for their respective dependence on an allowable base claim.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 7-10 and 16-18 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff  
Registration No. 27,075

Robert M. Jackson  
Registration No. 46,796

JAO:RMJ/tls

Date: September 13, 2006

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

<p><b>DEPOSIT ACCOUNT USE AUTHORIZATION</b> Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
---